

Consumption Advisories Workshop



Management Committee Charge – May, 2002



MC recommends that the GMPO form a Project Team on consumption advisories for mercury in Gulf marine fish. The team is to:

(1) develop recommendations for consumption advisories, as needed, for mercury in marine fish from the Gulf that are consistent in all five Gulf States.

(2) evaluate all aspects of consumption advisories, identify areas of consistency and inconsistency, and develop consensus recommendations on appropriate ways to address inconsistencies.

Management Committee

Charge continued



(3) develop a model consumption advisory based on the recommendations and

(4) propose a public outreach plan for appropriately communicating mercury risks in Gulf seafood to the public, including effective means for disseminating the advisories to the public.

The Team should strive to complete its work and present its final recommendations to the MC within one year.

The Goals of the Workshop



- (1) evaluate all aspects of consumption advisories, identify areas of consistency and inconsistency
- (2) determine if we can develop a consistent advisory for king mackerel that can be used as boiler plate for other species
- (3) identify species that are pelagic and cross state lines where it may be possible to develop a common advisory if high mercury levels are found in the future
- (4) establish a work plan for accomplishing any remaining activities



Consumption Advisories Workshop Overview

December 10-11, 2002
Embassy Suites
New Orleans, LA

- Ron Lukens introduced the **Gulf States Marine Fisheries Commission Resolution on Methylmercury**. The Commission was asked to form a steering committee that would provide recommendations for actions in Gulf States to address mercury in marine fish. Draft recommendations were reviewed.
- Spencer Garrett (NOAA Fisheries, Pascagoula) introduced the **NMFS Synoptic Survey of Total Mercury in Recreational Finfish in the Gulf of Mexico**. The Synoptic Survey is intended to determine variation in mercury levels among different species in different locations in the Gulf, to address risk to recreational and commercial anglers that are eating their catch.





- Annette Ashizawa (ATSDR) provided an overview of human developmental stages, and timelines of susceptibility of various organs to developmental (teratogenic) effects.
- Most major nervous system development has occurred by age $3 \frac{1}{2}$, and 6 yrs is considered the end of the critically susceptible period.
- Further developmental changes occur in the brains of adolescents. It is not known if this represents an additional period of susceptibility to mercury effects.



- Consumptive advisory processes were discussed for EPA, FDA, and the five Gulf States.
- Jeff Bigler/EPA remotely reviewed the EPA approach
- Philip Spiller/FDA remotely reviewed the FDA approach
- State representatives provided state approaches to determining advisories, and provided specific information on the following parameters:
 - Mercury toxicity value
 - Action/guidance level
 - Meal size
 - Meal frequency
 - Assumptions for general population and sensitive subpopulations (women of child bearing age and children)



- State king mackerel advisories were compared.
- The group agreed that the current king mackerel advisories are very similar for the five states. Standardizing meal sizes and frequencies for the purpose of comparison allowed the group to identify where differences do occur.
- While a common advisory is an achievable goal, advisory parameters must be harmonized for any common Gulf-wide fish consumption advisory, including a king mackerel advisory.
- The group attempted to reach consensus on common wording for the advisory parameters.



- Consensus was reached on the following parameters:

- adult weight: 70kg

- meal size (fish in general): 8oz/raw, 6oz cooked

- susceptible women: women of childbearing age

- king mackerel lengths:

- fork length should be used

- no consumption: >39" fork length

- restricted consumption: 33" - 39" fork length



- Consensus was not reached on the these king mackerel advisory parameters:

- age of children. It is agreed that this age should be at least 7. Age definition will be revisited following review of research on development changes and susceptibility in adolescents.

- king mackerel lengths: lowest level advisory (<33" fork length). This advisory level will be revisited following review of new research on potential cardiological effects of mercury.



- Consensus was also not reached on the remaining king mackerel advisory parameters:
 - reference dose: Some states are reviewing their RfDs and advisory methodology. It was agreed that the group could not at this time define a common RfD, but would continue to revisit the issue.
 - meal frequency: The group recognized that because meal frequency is calculated from the RfD, a common definition will need to follow a determination of a common RfD.



- Other species that may be candidates for common Gulf-wide advisories were discussed.
- Highly migratory pelagic species whose range includes all five states are initial candidates. This species group may be refined by focusing on those species that are commonly consumed.
- Those species that are not highly migratory but for which similar mercury levels exist in multiple states may also be candidates.
- Sharing research and advisory development at the state level will help to identify potential candidates for common advisories.



- The public outreach discussion concluded that it is too early to identify outreach for the king mackerel advisory, but that it will be beneficial for the group to begin to study other fish advisory outreach material.
- The group agreed that it is essential to define the target population of the advisory in order to define the target population and goals of the outreach program.
- The group agreed that the target population of the king mackerel advisory is "Recreational king mackerel fishermen, their families, and friends".

The Group will have a conference call in early February. Discussion items will include:



- Review of literature on developmental susceptibility of adolescents to define "age of children"
- Review of literature on potential cardiovascular effects of mercury
- Review of FL data split: $>36"$ vs. $36"$ for king mackerel for consideration of 2-level advisory
- Potential redefinition of lowest king mackerel advisory level (currently $<33"$) based on new cardio literature
- Revisit RfD revisions with states to check on progress and see if this group can help facilitate the process
- Consider scheduling another meeting